

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
24 July 2003 (24.07.2003)

PCT

(10) International Publication Number  
WO 2003/060825 A3

(51) International Patent Classification<sup>7</sup>: A61C 13/00,  
1/08, A61B 6/12

(21) International Application Number:  
PCT/IL2003/000043

(22) International Filing Date: 16 January 2003 (16.01.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/348,382 16 January 2002 (16.01.2002) US

(63) Related by continuation (CON) or continuation-in-part  
(CIP) to earlier application:  
US 60/348,382 (CIP)  
Filed on 16 January 2002 (16.01.2002)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:  
— with international search report

(71) Applicant and

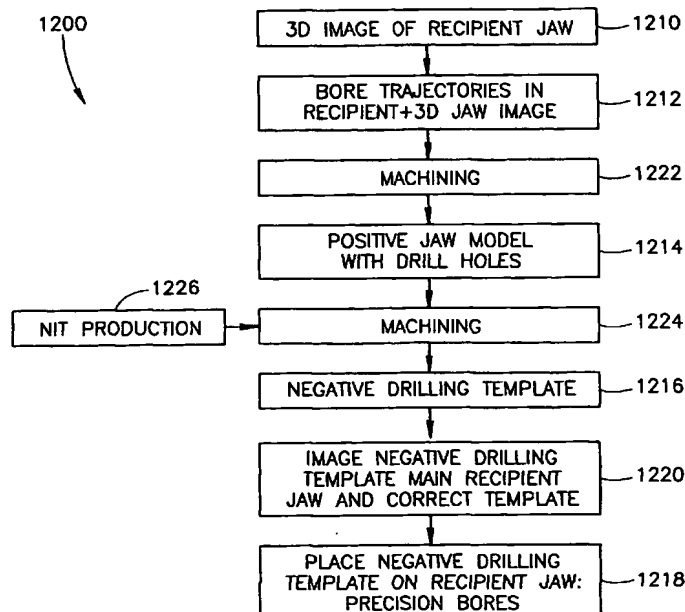
(72) Inventor: FELDMAN, Andrei [IL/IL]; Shoshanat  
Hacarmel Street 84, 34323 Haifa (IL).

(88) Date of publication of the international search report:  
6 May 2004

(74) Agents: FENSTER, Paul et al.; Fenster & Company,  
Intellectual Property 2002 Ltd., P.O. Box 10256, 49002  
Petach Tikva (IL).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ORAL IMPLANT TEMPLATE



(57) Abstract: A method for producing an artifact-corrected image of a negative jaw impression in a recipient jaw comprising, forming a negative impression of said recipient jaw, producing a first digital image of said negative jaw impression, producing a second digital image, including said artifacts of said negative jaw impression in said recipient jaw and using said first digital image to produce an artifact-corrected computer representation of said negative impression in said recipient jaw.

# INTERNATIONAL SEARCH REPORT

Intern. Application No  
PCT/IL 03/00043

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61C13/00 A61C1/08 A61B6/12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61C A61B G06T

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 725 376 A (POIRIER MICHEL) 10 March 1998 (1998-03-10) cited in the application the whole document	1
A	US 5 927 982 A (KRUGER BERNARD M) 27 July 1999 (1999-07-27) cited in the application the whole document	1
A	FR 2 700 039 A (GEN ELECTRIC CGR) 1 July 1994 (1994-07-01) the whole document	1
X	DE 100 29 256 A (WOLZ STEFAN) 30 November 2000 (2000-11-30)	20-22, 24,28-30
A	the whole document	1
	--- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

17 July 2003

Date of mailing of the international search report

25. 07. 2003

Name and mailing address of the ISA  
European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Vanrunxt, J

# INTERNATIONAL SEARCH REPORT

Interr

Application No

PCT/IL 03/00043

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 118 845 A (SIMON DAVID A ET AL) 12 September 2000 (2000-09-12) the whole document	31
A	EP 0 544 505 A (GEN ELECTRIC) 2 June 1993 (1993-06-02) the whole document	31

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/IL 03/00043

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-19

Method for producing an artifact-corrected image of a negative jaw impression

2. Claims: 20-30

Method for producing a model of a recipient jaw from which a drilling template is machined

3. Claims: 31-43

Digital image merging system

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IL 03/00043

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5725376	A	10-03-1998	US 2002102517 A1 US 6382975 B1	01-08-2002 07-05-2002
US 5927982	A	27-07-1999	NONE	
FR 2700039	A	01-07-1994	FR 2700039 A1	01-07-1994
DE 10029256	A	30-11-2000	DE 10029256 A1 WO 0195824 A1	30-11-2000 20-12-2001
US 6118845	A	12-09-2000	AU 4837799 A EP 1091690 A1 US 2002154735 A1 WO 0000086 A1 US 6370224 B1	17-01-2000 18-04-2001 24-10-2002 06-01-2000 09-04-2002
EP 0544505	A	02-06-1993	US 5225980 A EP 0544505 A2 JP 5237092 A JP 7083745 B	06-07-1993 02-06-1993 17-09-1993 13-09-1995